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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/815,927	04/02/2004	Yasuaki Yatagai	4059-21	9422
23117	7590	12/21/2005		
NIXON & VANDERHYE, PC 901 NORTH GLEBE ROAD, 11TH FLOOR ARLINGTON, VA 22203			EXAMINER BOEHLER, ANNE MARIE M	
			ART UNIT	PAPER NUMBER
			3611	
DATE MAILED: 12/21/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/815,927

Applicant(s)

YATAGAI ET AL.

Examiner

Anne Marie M. Boehler

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 August 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 23-26 and 28-55 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 21-26, 28-31 and 34-49 is/are rejected.
- 7) ☒ Claim(s) 32, 33 and 50-53 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

1. Claim 49 is objected to because of the following informalities: The subject matter of claim 49 is essentially identical to a portion of claim 44, lines 6-7, from which claim 49 depends. Appropriate correction is required.

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 23-26, 28-31, and 34-49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ashida (USPN 6,227,323) in view of Shank (USPN 3,786,890) and Tscherne (USPN 6,544,086)

Ashida shows a snowmobile with a body frame 23, front ski-runner 32, a crawler/track 52, and a forwardly inclined engine 36 with a transversely arranged crankcase. It also shows the air inlet at the rear of the engine, below and proximate the windshield, and an exhaust manifold at the front of the engine. The drive system lacks a supercharger.

Shank shows a snowmobile with an engine and supercharger. The engine exhaust and air intake are at the front of the engine.

Tscherne teaches a vehicle with a four-cycle engine and supercharger. Tscherne teaches providing the disclosed engine and supercharger arrangement in a snowmobile.

It would have been obvious to one of ordinary skill in the art to provide the Ashida snowmobile with a supercharger, as taught by Shank, in order to enhance performance

of the vehicle. It would also have been obvious to provide a four-cycle engine, as taught by Tscherne, in order to reduce noise and emissions.

4. Claims 32, 33, and 50-53 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

5. Applicant's arguments with respect to claims 23-26, 28-31, and 34-39 have been considered but are moot in view of the new ground(s) of rejection.

Applicant argues that it would not have been obvious to reconfigure the Ashida snowmobile to have a four-cycle engine because the change would be complicated and require a larger engine compartment. The examiner disagrees. It is well known to provide a four-cycle engine in small, personal use vehicles, such as snowmobiles, ATV's and small watercraft and the benefits are well established. Tscherne specifically teaches providing a four-cycle engine in a snowmobile, as an alternative to a two-cycle engine. It also articulates the benefits for doing so, including "emissions output are generally desirably lower as compared to a two-cycle engine for a given power output". Any size adjustment would be easily accommodated by one of ordinary skill in the art. Therefore, the combination is believed to meet applicant's claimed invention.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anne Marie M. Boehler whose telephone number is 571-272-6641. The examiner can normally be reached on 7:30-5:00, Monday-Thursday, and alternate Fridays.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lesley Morris can be reached on 571-272-6612. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Anne Marie M. Boehler
Primary Examiner
Art Unit 3611

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